## ABSTRACT OF THE DISCLOSURE

An apparatus for calculating an azimuth angle includes a two-axis earth magnetic sensor, which is mounted on a device that requires azimuth information, for measuring a strength of an earth magnetic field according to the azimuth information if the device moves, an inclinometer for calculating an attitude such as a roll angle and a pitch angle, a signal conditioning unit including an analog-to-digital (A/D) converter for converting sensor data into a digital value, a microprocessor for calculating the azimuth information by compensating for an attitude error using outputs of the two-axis earth magnetic sensor and the inclinometer, a serial communication interface for transmitting the data processed by the microprocessor, and an LCD module for displaying the azimuth information calculated by the microprocessor.